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EXAMINER	
FRENEL, VANEL	
ART UNIT	PAPER NUMBER
3687	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/648,861	SARTHI ET AL.	
	Examiner	Art Unit	
	VANEL FRENEL	3687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *42-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *42-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date. _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the Amendment filed on10/09/08. Claims 1-41 have been cancelled. Claims 42, 44-45, 49-53, 55-56 have been amended. Claims 57-58 have been newly added. Claims 42-58 are pending.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 42-49 and 57-58 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 42-49 and 57-58 recite the method comprising the steps of: identifying, identifying, identifying, using, generating and outputting. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr,* 450 U.S. 175, 184 (1981); *Parker* v. *Flook,* 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson,* 409 U.S. *63,* 70 (1972); *Cochrane* v. *Deener,* 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter

that is being transformed, for example by identifying the material that is being changed to a different state.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 42-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al (5,799,286) hereinafter Morgan in view of Ulwick (6,115,691) and further in view of Myers (2002/0198808).

As per claim 42, Morgan discloses a computer-implemented method of managing a process, said computer-implemented method comprising: identifying activities that comprise the process, wherein the process is a series of activities, wherein an input of at least one subsequently activity is dependent on an output of at least one previous activity (See Morgan, Col .7, lines 14-44); identifying drivers associated with at least one metric, reflecting an efficiency of said process, for each of the activities (See Morgan, Col.7, lines 14-44); identifying bridge variables from said identified drivers, wherein each bridge variable is a driver that is relevant to more than one of said activities (See Morgan, Col .20, lines 13-61).

Morgan does not explicitly disclose that the method having establishing a relationship between various drivers by representing at least one non-bridge variable

driver in terms of one or more of said bridge variables; using said relationship, representing each of said activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities to represent the entire series of activities of said process; generating a model of said process at least as a function of said bridge variables by combining representations of activities comprising said process.

However, these features are known in the art, as evidenced by Ulwick. In particular, Ulwick suggests that the method having establishing a relationship between various drivers by representing at least one non-bridge variable driver in terms of one or more of said bridge variables (See Ulwick, Col.1, lines 41-67; Col.3, lines 27-67); using said relationship, representing activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities to represent the entire series of activities of said process (See Ulwick, Col.1, lines 41-67 to Col.2, line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Ulwick within the system of Morgan with the motivation of providing systematically accelerating the evolution of a process or satisfying a set of desired outcomes. A process is a series of activities or events that produce a desired result, which may comprise a plurality of desired outcomes. All strategies, products or services as well as other solutions are designed to improve or enable a process (See Ulwick, Col .9, lines 5-17).

As best understood, Morgan and Ulwick disclose all the limitations above. The combination of Morgan and Ulwick does not explicitly disclose generating a model of said process at least as a function of said bridge variables by combining representations of activities comprising said process; and outputting, from said model, a predictive metric reflecting an efficiency of total process.

However, these features are known in the art, as evidenced by Myers. In particular Myers suggests generating a model of said process at least as a function of said bridge variables by combining representations of activities comprising said process (See Myers, Page 7; Paragraphs 0059-0061); and outputting, from said model, a predictive metric reflecting an efficiency of total process (See Myers, Page 7; Paragraphs 0059-0061).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Myers within the collective teachings of Ulwick and Morgan with the motivation of providing supply chain participants can make intelligent decisions to provide additional capital to be used to address an individual supplier's internal systemic problems (See Myers, Page 3; Paragraph 0023).

As per claim 43, Ulwick discloses the computer-implemented method further comprising: selecting a plurality of constraints (See Ulwick, Fig.17, element 211; Col .22, lines 37-67), and wherein generating said model of said process includes generating said model as a function of said bridge variables and said plurality of constraints (See Ulwick, Fig.17, element 211; Col .22, lines 37-67).

The motivation for combining the respective teachings of Morgan, Ulwick and Myers are as discussed above in the rejection of claim 42, and incorporated herein.

As per claim 44, Ulwick discloses the computer-implemented method further comprising: optimizing said model in view of said plurality of constraints using one of the following: a linear programming algorithm (See Ulwick, Col .22, lines 37-67), a mixed-integer linear programming algorithm, and a mixed-integer nonlinear programming algorithm (See Ulwick, Col .3, lines 34- 65); and reconstructing a representation of said activities and said drivers using said optimized model (See Ulwick, Col .17, lines 21-67).

The motivation for combining the respective teachings of Morgan, Ulwick and Myers are as discussed above in the rejection of claim 42, and incorporated herein.

As per claim 45, Myers discloses the computer-implemented method wherein said reconstructing includes calculating a value of at least one non-bridge variable driver using values of corresponding bridge variables only, and calculating a value of activities using values calculated for at least bridge variable driver and non-bridge variable driver of respective activities (See Myers, Page 7; Paragraphs 0059-0061).

The motivation for combining the respective teachings of Morgan, Ulwick and Myers are as discussed above in the rejection of claim 42, and incorporated herein.

As per claim 46, Ulwick discloses the computer-implemented method further comprising: revising said model using the results from said optimization step (See Ulwick, Col .21, lines 48-56).

The motivation for combining the respective teachings of Morgan, Ulwick and Myers are as discussed above in the rejection of claim 42, and incorporated herein.

As per claim 47, Ulwick discloses the computer-implemented method wherein selecting said plurality of constraints includes selecting economic and non-economic constraints (See Ulwick, Fig.17, element 211; Col.22, lines 37-67).

The motivation for combining the respective teachings of Morgan, Ulwick and Myers are as discussed above in the rejection of claim 42, and incorporated herein.

As per claim 48, Ulwick discloses the computer-implemented method wherein identifying measurable drivers includes identifying economic and non-economic drivers (See Ulwick, Fig.17, element 211; Col .22, lines 37-67).

The motivation for combining the respective teachings of Morgan, Ulwick and Myers are as discussed above in the rejection of claim 42, and incorporated herein.

As per claim 49, Ulwick discloses the computer-implemented method wherein identifying said drivers includes identifying at least one of fixed and variable components of each said driver, and wherein said method further comprising:

determining said metric of each said driver based on said at least one of fixed and variable components thereof (See Ulwick, Col. 17, lines 30-43).

The motivation for combining the respective teachings of Morgan, Ulwick and Myers are as discussed above in the rejection of claim 42, and incorporated herein.

As per claim 50, Morgan discloses a system, comprising: a computer (See Morgan, Col .3, lines 55-64); input and output devices in communication with said computer (See Morgan, Col .3, lines 64 to Col .4, line 11); and a memory encoded with a computer program (See Morgan, Col .4, lines 44-60), which, when executed by said computer, causes said computer to perform the following:
allow a user to identify activities that comprise a process, wherein the process is a series of activities, wherein an input of at least one subsequent activity is dependent on an output of at least one previous activity (See Morgan, Col .7, lines 14-44).
further allow said user to identify measurable drivers associated with at least one metric, reflecting an efficiency of said process, for each of the activities (See Morgan, Col.20, lines 13-61); identify bridge variables from said identified drivers, wherein each bridge variable is a driver that is relevant to more than one of said activities (See Morgan, Col.6, lines 14-63).

Morgan does not explicitly disclose that the system having establish a relationship between various drivers by representing at least one non-bridge variable driver in terms of one or more of said bridge variables; using said relationship, represent activities at least as a function of one or more of said bridge variables, thereby reflecting

interdependence between said activities to represent the entire series of activities of said process.

However, these features are known in the art, as evidenced by Ulwick. In particular, Ulwick suggests that the method having establish a relationship between various drivers by representing at least one non-bridge variable driver in terms of one or more of said bridge variables establish a relationship between various drivers by representing at least one non-bridge variable driver in terms of one or more of said bridge variables (See Ulwick, Col.1, lines 41-67; Col.3, lines 27-67); using said relationship, represent activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities to represent the entire series of activities of said process (See Ulwick, Col.1, lines 41-67 to Col.2, line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Ulwick within the system of Morgan with the motivation of providing systematically accelerating the evolution of a process or satisfying a set of desired outcomes. A process is a series of activities or events that produce a desired result, which may comprise a plurality of desired outcomes. All strategies, products or services as well as other solutions are designed to improve or enable a process (See Ulwick, Col.9, lines 5-17).

As best understood, Morgan and Ulwick disclose all the limitations above. The combination of Morgan and Ulwick does not explicitly disclose generate a model of said process at least as a function of said bridge variables by combining representations of

activities comprising said process; and output, from said model, a predictive metric reflecting an efficiency of the total process.

However, these features are known in the art, as evidenced by Myers. In particular Myers suggests generating a model of said process at least as a function of said bridge variables by combining representations of activities comprising said process (See Myers, Page 7; Paragraphs 0059-0061); and outputting, from said model, a predictive metric reflecting an efficiency of total process (See Myers, Page 7; Paragraphs 0059-0061).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Myers within the collective teachings of Ulwick and Morgan with the motivation of providing supply chain participants can make intelligent decisions to provide additional capital to be used to address an individual supplier's internal systemic problems (See Myers, Page 3; Paragraph 0023).

Claim 53 differs from claims 42 and 50 by reciting a computer-readable data storage medium containing program instructions, which, when executed by a processor, cause said processor to perform the following.

As per this limitation, it is noted that Morgan discloses allow a user to identify activities that comprise a process, wherein the process is a series of activities, wherein an input of at least one subsequent activity is dependent on an output of at least one previous activity (See Morgan, Col.7, lines 14-44); further allow said user to identify drivers associated with a metric reflecting an efficiency of said process for each of the

activities (See Morgan, Col.7, lines 14-44); identify bridge variables from said identified drivers,… wherein each bridge variable is a driver that is relevant to more than one of said activities (See Morgan, Col.20, lines 13-61) and Ulwick discloses establish a relationship between various drivers by representing at least one non- bridge variable driver in terms of one or more of said bridge variables only (See Ulwick, Col .1, lines 41-67; Col.3, lines 27-67); using said relationship, represent activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities to represent the entire series of activities of said process (See Ulwick, Col .1, lines 41-67 to Col .2, line 12) and Myers discloses generate a model of said process at least as a function of said bridge variables by combining representations of all activities comprising said process (See Myers, Page 7; Paragraphs 0059-0061); and output, from said model, a predictive metric reflecting on efficiency of the total process (See Myers, Page 7; Paragraphs 0059-0061).

Thus, it is readily apparent that these prior art systems utilize a computer-readable data storage medium containing program instructions, which, when executed by a processor to perform their specified function.

The remainder of claim 53 is rejected for the same reasons given above for claims 42 and 50, and are incorporated herein.

Claims 51-52 and 54-55 recite the underlying process steps of the elements of claims 44-45, and respectively. As the various elements of claims 44-45 have been shown to be either disclosed by or obvious in view of the collective teachings of Morgan,

Ulwick and Myers, it is readily apparent that the apparatus disclosed by the applied prior art performs the recited underlying functions. As such, the limitations recited in claims 51- 52 and 54-55 are rejected for the same reasons given above for the method claims 44-45, and incorporated herein.

As per claim 56, Ulwick discloses the storage medium wherein said program instructions, upon execution, cause said processor to cost each said driver identified by said user (See Ulwick, Col .22, lines 37-67 to Col.23, line 13).

As per the newly added claim 57, Morgan discloses a computer-implemented method of managing a process, said computer implemented method comprising: identifying activities that comprise the process, wherein the process is a series of activities, wherein an input of at least one subsequent activity is dependent on an output of at least one previous activity (See Morgan, Col.7, lines 14-44).

Morgan does not explicitly disclose identifying drivers associated with at least one metric, reflecting an efficiency of said process, for each of the activities, wherein identifying said drivers includes identifying at least one of fixed components and variable components of said driver; determining a metric for each said driver based on said at least one of fixed components and variable components thereof.

However, these features are known in the art, as evidenced by Ulwick. In particular, Ulwick suggests that the method having identifying drivers associated with at least one metric, reflecting an efficiency of said process, for each of the activities,

wherein identifying said drivers includes identifying at least one of fixed components and variable components of said driver (See Ulwick, Col.1, lines 41-67; Col.3, lines 27-67); determining a metric for each said driver based on said at least one of fixed components and variable components thereof (See Ulwick, Col.3, lines 27-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Ulwick within the system of Morgan with the motivation of providing systematically accelerating the evolution of a process or satisfying a set of desired outcomes. A process is a series of activities or events that produce a desired result, which may comprise a plurality of desired outcomes. All strategies, products or services as well as other solutions are designed to improve or enable a process (See Ulwick, Col .9, lines 5-17).

As best understood, Morgan and Ulwick disclose all the limitations above. The combination of Morgan and Ulwick does not explicitly disclose generating a model of said process at least as a function of said bridge variables by combining representations of activities comprising said process; and outputting, from said model, a predictive metric reflecting an efficiency of total process.

However, these features are known in the art, as evidenced by Myers. In particular Myers suggests generating a model of said process at least as a function of said bridge variables by combining representations of activities comprising said process (See Myers, Page 7; Paragraphs 0059-0061); and outputting, from said model, a predictive metric reflecting an efficiency of total process (See Myers, Page 7; Paragraphs 0059-0061).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the features of Myers within the collective teachings of Ulwick and Morgan with the motivation of providing supply chain participants can make intelligent decisions to provide additional capital to be used to address an individual supplier's internal systemic problems (See Myers, Page 3; Paragraph 0023).

As per the newly added claim 58, Myers discloses a method wherein the fixed and variable components of each said driver are the fixed and variable costs of each said driver (Myers, Page 7, Paragraphs 0059-0061).

Response to Arguments

6. Applicant's arguments filed 10/09/08 with respect to claims 42-58 have been considered but are moot in view of the new ground(s) of rejection.
In response, all of the limitations which Applicant disputes as missing in the applied references, including the features newly added in the 10/09/08 amendment, have been fully addressed by the Examiner as either being fully disclosed or obvious in view the teachings of Morgan, Ulwick and Myers based on the logic and sound scientific reasoning of one ordinarily skilled in the art at the time of the invention, as detailed in the remarks and explanations given in the preceding sections of the present Office Action and in the prior Office Action, and incorporated herein. One cannot show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091,231 USPQ 375 (Fed. Cir. 1986).

In addition, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not the applied art teaches system and method for systems integration (6,950,802).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 571-272-6769. The examiner can normally be reached on 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Gart can be reached on 571-272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vanel Frenel/

Examiner, Art Unit 3687

January 17, 2009

/Matthew S Gart/
Supervisory Patent Examiner, Art Unit 3687